

Name _____



Date _____

Logarithms

(Answer ID # 0266269)

Express in logarithmic form.

1. $3^6 = 729$	2. $2^5 = 32$	3. $6^3 = 216$
4. $4^{(1/2)} = 2$	5. $8^{-2} = \frac{1}{64}$	6. $4^{-6} = \frac{1}{4096}$
7. $(1/4)^2 = \frac{1}{16}$	8. $6^{-2} = \frac{1}{36}$	9. $(1/2)^{-4} = 16$
10. $27^{(1/3)} = 3$	11. $8^{(2/3)} = 4$	12. $(1/2)^2 = \frac{1}{4}$
13. $81^{(1/4)} = 3$	14. $6^{-4} = \frac{1}{1296}$	15. $(1/4)^{-3} = 64$
16. $8^2 = 64$	17. $(1/3)^3 = \frac{1}{27}$	18. $5^{-3} = \frac{1}{125}$

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Logarithms

(Answer ID # 0896044)

Express in exponential form.

1. $\log_3 243 = 5$	2. $\log_4 256 = 4$	3. $\log_9 729 = 3$
4. $\log_{27} 9 = \frac{2}{3}$	5. $\log_8 \left[\frac{1}{64} \right] = -2$	6. $\log_5 625 = 4$
7. $\log_{(1/2)} \left[\frac{1}{4} \right] = 2$	8. $\log_3 \left[\frac{1}{729} \right] = -6$	9. $\log_2 32 = 5$
10. $\log_{81} 9 = \frac{2}{4}$	11. $\log_8 4 = \frac{2}{3}$	12. $\log_{(1/2)} 8 = -3$
13. $\log_{(1/2)} \left[\frac{1}{16} \right] = 4$	14. $\log_9 \left[\frac{1}{81} \right] = -2$	15. $\log_{(1/3)} 9 = -2$
16. $\log_{27} 3 = \frac{1}{3}$	17. $\log_{81} 3 = \frac{1}{4}$	18. $\log_4 8 = \frac{3}{2}$